



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/020,652

12/13/2001

Taeyoun Kwon

671-10 (P9936)

2016

28249 7590 03/29/2007

DILWORTH & BARRESE, LLP
333 EARLE OVINGTON BLVD.
SUITE 702
UNIONDALE, NY 11553

EXAMINER

BHATTACHARYA, SAM

ART UNIT

PAPER NUMBER

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
----------------------------------------	-----------	---------------

3 MONTHS

03/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/020,652

Applicant(s)

KWON, TAEYOUN

Examiner

Sam Bhattacharya

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-13 and 15-20 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 and 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/5/07 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al. (US 6,862,651) in view of Brown, III et al. (US 6,038,636).

Regarding claims 1 and 3, Beckert et al. discloses a mobile communication device that includes a flash memory 402 for storing program data and user data, an interface circuit 414 over which data is copied from the flash memory, a first RAM 404 for providing an operation area to store and execute the copied program data from the flash memory, and a second RAM 406 for storing data generated during the execution of the program data, wherein the first and second RAMs are independent memories. See FIG. 4, col. 22, lines 9-35, col. 23, lines 8-38 and col. 24, lines 20-32.

Art Unit: 2617

Beckert et al. fails to disclose copying program data stored in the flash memory according to whether data stored in the flash memory is valid.

In an analogous art, Brown, III et al. disclose a method of reclaiming and defragmenting a flash memory device in which data is copied from the flash memory to another memory based on whether it is valid. See col. 3, lines 28-49. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Beckert et al. by incorporating these teachings of Brown, III et al. for the purpose of restoring only valid files to the flash memory in their original format.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al. in view of Brown, III et al. and Costello et al. (US 6,754,894).

The Beckert-Brown combination fails to disclose a flash memory that is a NAND-type type flash memory.

However, in an analogous art, Costello et al. discloses a mobile communication device that includes a NAND-type flash memory 512 that stores program data and user data. See FIG. 5 and col. 6, lines 5-32. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Beckert et al. and Brown, III et al. by incorporating this feature taught in Costello et al. for the purpose of achieving a larger memory space and faster memory speeds.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al. in view of Brown, III et al. and Niiyama et al. (US 5,400,389).

Art Unit: 2617

Regarding claim 3, Beckert et al. discloses that the first memory 508 and the second memory 510 are NOR flash and RAM memories, respectively. However, the combination of Beckert et al. and Brown, III et al. fails to disclose both first and second memories that are RAM memories.

Niiyama et al. discloses a mobile communication device that includes a microprocessor 501, a ROM 502 (which can be a flash ROM), and first and second RAMs 503 and 504. The microprocessor controls the operations of the RAMs according to an operation program stored in the flash ROM. See FIG. 4 and col. 5, line 62 - col. 6, line 29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Beckert et al. and Brown, III et al. by using first and second RAM memories as taught by Niiyama et al. to attain faster speeds of access and execution for data and programs stored in the memories.

Regarding claim 5, Niiyama et al. discloses mobile communication device that includes an interface circuit 506 that generates a chip enable signal enabling the flash ROM 502. See col. 6, lines 11-18. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Beckert et al. and Brown, III et al. by sending a chip enable signal from the interface circuit to the flash memory as taught by Niiyama et al. to activate the flash memory in association with an address supplied from the microprocessor.

Double Patenting

6. Applicant is advised that should claim 1 be found allowable, claim 3 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Allowable Subject Matter

7. Claims 11-13 and 16-20 are allowed.

8. Claims 4 and 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the claims are objected to or allowed for the reasons stated in a previous Office action.

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2617


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-6, with first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sb


GEORGE ENG
SUPERVISORY PATENT EXAMINER